REMARKS

Prior to this paper, claims 1-20 were pending in the application. Claims 1, 9, 14 and 20 have been amended. Claims 21-26 have been added. Claims 8, 18 and 19 have been deleted. Therefore, claims 1-7, 9-17 and 20-26 are pending in the present application. Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and in view of the reasons that follow.

Indication of Allowable Subject Matter

Applicants thank Examiner Huynh for indicating that claim 19 contains allowable subject matter.

Claim Rejections Under 35 U.S.C. § 103(a)

In the Office Action, the claims were rejected variously under 35 U.S.C. §102(b), 35 U.S.C. §102(e) and 35 U.S.C. §103 in view of Nagasaka, Uchida, Murata, Matsumoto and/or Kimura.

In response, Applicants have incorporated the recitations of claim 19 (the allowed claim), including the recitations of claims 8 and 18 (intervening claims from which 19 depends), into claim 1 (the base claim from which claim 19 ultimately depends). Therefore, claim 1 now contains all of the recitations of allowed claim 19, and is thus in *prima facie* condition for allowance.

Claims 2-7 and 9-17 and 20 are now allowable for at least the reason that the claims depend either directly or indirectly from claim 1, a claim that is in condition for allowance.

New Claims

As noted above, Applicants have added new claims 21-26. Each of these claims contain the recitations of original claim 1. Further, claims 21 and 22 contain recitations directed to the configuration of the collector, while claim 23 contains recitations to pressure control devices of the collector.

Claim 21 is directed to a recessed portion 72 that is provided to avoid the interference between a collector 38 and a fuel injection valve 70 injecting fuel spray into an intake port 34 (see page 14, lines 13-16, and Figs. 1 and 12 of the specification). None of the cite references, alone or in combination, discloses or suggests such a recessed portion by which the interference between a collector and a fuel injection valve can be avoided.

Claim 22 is directed to intake-manifold branches 40 that are located in the collector 38 (see page 15, lines 22-25 and Figs-1, 10 and 12 of the specification). In contrast, in the engine induction systems of the cited references, in particular Nagasaka and Uchida, much of each of intake-manifold branches is *exposed* on the outside of the collector. Thus, claim 22 is believed to be allowable.

Claim 23 is directed to a pressure control valve (a vacuum control valve) 64 that is disposed in an intake pipe 62 upstream of collector 38 to *adjust a vacuum pressure* in collector 38 to a predetermined constant vacuum pressure value (a predetermined constant negative pressure value) ranging from, by way of example and not by limitation, -100 mmHg to -200 mmHg (see page 19, lines 20-23 and lines 31-33 and Figs. 2, 11, 12 and 13 of the specification).

In contrast, in the systems of the cited references, in particular Matsumoto, a control valve 41 (see Figs. 10 and 11 and column 11, lines 28-37 of Matsumoto) is disposed in an inner passage intercommunicating a resonance chamber 33 and a suction gathering chamber 15, to control fluid communication between two chambers 33 and 15 via *supercharging*. As can be seen from column 11, lines 28-37, of Matsumoto, control valve 41 functions to perform suction utilizing the inertia supercharging effect in the valve-closed state at low engine speeds, and also to perform suction utilizing the resonance supercharging effect (see the characteristic curve shown in Fig. 11 of Matsumoto) in the valve-open state at middle and high engine speeds, and, as a whole, to realize a high volumetric efficiency. It is noted that control valve 41 of Matsumoto never serves as a vacuum control valve that adjusts or regulates a vacuum pressure (a negative pressure) in the collector to a predetermined constant pressure value. Therefore, claim 23 is likewise believed to be allowable.

New claims 24 to 26 are allowable for at least the reason that they depend from claims 21 and 22, respectively, which, as seen above, are allowable.

C nclusion

Applicants believe that the present application is in condition for allowance, and favorable reconsideration is requested.

If Applicants have not accounted for any fees required by this Amendment, the Commissioner is hereby authorized to charge to Deposit Account No. 19-0741. If Applicants have not accounted for a required extension of time under 37 C.F.R. § 1.136, that extension is requested and the corresponding fee should be charged to our Deposit Account.

Examiner Huynh is invited to contact the undersigned by telephone if it is felt that a telephone interview would advance the prosecution of the present application.

Respectfully submitted,

Date March 26, 2003

By _____

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Should additional fees be necessary in connection with the filing of this paper, the Commissioner is hereby authorized to charge Deposit Account No. 19-0741 for any such fees.

MARKED UP VERSION SHOWING CHANGES MADE

Below are the marked up amended claims 1, 9, 14 and 20:

1. (Amended) An intake system of an internal combustion engine, comprising:

a collector fixedly connected directly to either of a side wall of a cylinder head and a collector mounting bracket hermetically covering perimeters of intake-port opening end portions of a plurality of intake ports opening through the side wall; ~~and~~

a plurality of intake-manifold branches respectively communicating with the plurality of intake ports and protruded into an interior space of the collector~~.~~;

a variable valve actuation system that continuously variably adjusts a valve lift characteristic of an intake valve, the variable valve actuation system comprising a first variable valve actuation mechanism capable of continuously variably adjusting the working angle and the lift of the intake valve;

a control unit configured to be electronically connected to the variable valve actuation system for variably controlling an intake-air quantity through the variable valve actuation system; wherein

the first variable valve actuation mechanism comprising a drive shaft, an eccentric cam driven by the drive shaft, a first link fitted to an outer periphery of the eccentric cam to permit relative rotation of the first link to the eccentric cam, a control shaft arranged parallel to the drive shaft having a control cam whose axis is eccentric to an axis of the control shaft, a rocker arm fitted to an outer periphery of the control cam to permit relative rotation of the rocker arm to the control cam and connected at one end to the first link so that an oscillating motion of the rocker arm is produced through the first link, and a rockable cam rotatably supported on the drive shaft, and connected to the other end of the rocker arm via a second link, and being in abutted-engagement with a valve lifter of the intake valve so that the valve lifter is pushed by cam action of the rockable cam oscillating through the rocker arm; and wherein the

working angle and the lift of the intake valve are simultaneously adjusted by varying a center of rotation of the control cam of the control shaft.

9. (Amended) The intake system as claimed in claim ~~8~~ 1, further comprising:

a pressure control valve ~~is~~ located upstream of the collector connected to each of the intake ports to create a vacuum needed for the engine.

14. (Amended) The intake system as claimed in claim ~~8~~ 1, wherein;

in a middle load range an intake valve open timing of the intake valve is set to be phase-retarded with respect to an exhaust valve closure timing.

20. (Amended) The intake system as claimed in claim ~~8~~ 1, wherein:

the variable valve actuation system further comprises a second variable valve actuation mechanism capable of continuously variably adjusting a phase of a central angle of the working angle of the intake valve.